

ASX ANNOUNCEMENT 06 June 2022

DRILLING COMMENCES AT HIGHLY PROSPECTIVE CENTRAL TENEMENT GROUP IOCG TARGETS

Re-commencement of diamond drilling at the Georgina IOCG Project comes as Greenvale awarded two co-funding grants in Round 15 of the NTGS Geophysics and Drilling Collaborations Program

Highlights:

- Next phase of diamond drilling has commenced at the Georgina IOCG Project, NT.
- Drilling will initially focus on the highly prospective Central Tenement Group IOCG targets at Leichhardt and Banks.
- Initial programme of two holes for a total depth of 1,100m.
- Successful award of two co-funding grants in Round 15 of the NTGS Geophysics and Drilling Collaborations program, for a combined maximum grant value of \$253k.
- Co-funding grant will be used in part to explore an exciting deep target at the newly identified Leichhardt (East) prospect.
- Award of EL32964 provides security and continuity in central tenement grouping.

Greenvale Mining Limited (ASX: **GRV**, "**Greenvale**" or "the **Company**") is pleased to advise that it has commenced a new phase of diamond drilling at the Company's highly prospective Georgina Basin IOCG Project in the East Tennant Creek region in the Northern Territory.

This next phase of drilling will see two holes completed at the newly identified **Banks** and **Leichhardt West** targets, located within the Company's highly prospective central tenement grouping.

As previously announced, geophysical inversion modelling of previously acquired magnetic and gravity geophysical data covering part of EL32295 – together with the interpretation of the recently received assay results from the Company's initial drilling program – led to a reprioritisation of the Company's central tenements, particularly the newly-identified Banks and Leichhardt targets within EL32295 (see Figure 1).

Two diamond drill holes have been designed to test the Central Tenement Group prospects at Banks and Leichhardt West, to depths of 500m and 600m respectively. Strong magnetic and gravity anomalism, proximity to both regional faults and the Middle Island Crosswinds copper discovery indicate excellent prospectivity for IOCG mineralisation at these targets.

Banks and Leichhardt both display remnant magnetism – a feature of the mineralised ironstone-hosted deposits in Tennant Creek.



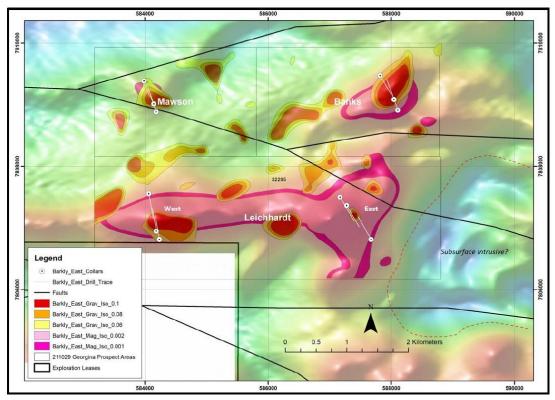


Figure 1: Overlay of Interpreted Gravity on Mawson, Banks & Leichhardt Magnetic Anomalies

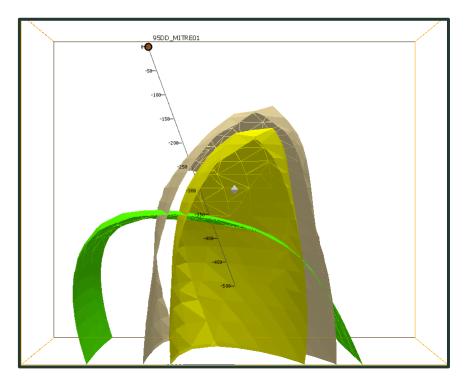


Figure 2: Banks Prospect drillhole design, inverted analytic signal magnetic anomaly (green) and gravity anomalies (cream/yellow)

The Greenvale field team has been working over the past three weeks to complete drill pad and access track preparation, as well as Turkey's Nest dam construction, the excavation of sumps and the drilling of two water bores. Experienced contractor Eagle Drilling NQ has been



engaged to complete the 1,100m drill programme, expected to take approximately 42 days to complete.



Figure 3: Drilling contractor on site at the Georgina Central tenement area

The Leichhardt and Banks targets are located in close proximity to both Middle Island Resources Ltd's (ASX: MDI) Crosswinds prospect, with reported surface copper mineralisation, and Inca Minerals Ltd's (ASX: ICG) Mt Lamb target (see Figure 4), both of which have seen increased exploration activity over the past three months.

Significant surface copper oxide mineralisation has been identified at Middle Island's Crosswinds prospect within EL32297, the eastern neighbour to Greenvale's EL32295. MDI reported spot p-XRF readings of between 24.8% Cu and 76.2% Cu at the Crosswinds prospect, validated by composite chip sampling assays of 130m at 0.76% Cu (MDI's ASX release dated 23 December 2020).





Figure 4: ICG's Mt. Lamb Prospect & MDI's Crosswinds Prospect (NDI drill holes in red)

ICG's Mount Lamb NE drill target (Figure 2) is located 3km north-east of the MinEx CRC drill hole NDIBK04, which was observed to contain a wide occurrence of sulphide mineralisation (including copper and zinc sulphides). According to ICG's most recent ASX release dated 1 June 2022, Inca's initial drill holes at Mount Lamb have intersected IOCG and SEDEX-style alteration, as well as visible sulphides – promising indications of the area's potential.

GRANT OF EL32964

The Company is pleased to advise that the Northern Territory Department of Industry, Tourism and Trade (DITT) have granted Knox Resources Pty Ltd, Greenvale Mining's 100%-owned subsidiary, tenement EL32964 for a term of 6 years, commencing on 30 May 2022, expiring on 29 May 2028.

EL32964 is small, consisting of 1 block for a total area of 1.01km², however management consider this area of strategic importance. EL32964 lies between the Company's existing land holdings EL32283 and EL32295 and its grant, therefore, provides security and continuity to the Company's central tenement grouping where the next phase of exploration has now begun.



ROUND 15 - GEOPHYSICS & DRILLING COLLABORATIONS PROGRAM:

Greenvale's 100%-owned subsidiary Knox Resources Pty Ltd, which holds the Georgina Project, has been awarded two co-funding grants by the NT Geological Survey, under round 15 of the Geophysics and Drilling Collaborations program, for a combined maximum grant value of \$253k:

- 1. Geophysical gravity and passive seismic surveying at the eastern area Ranken tenements \$82,413 (50% of eligible survey costs); and
- 2. Deep diamond drill-hole at Leichhardt East \$171,050 (50% of eligible drilling costs).

The award of the two co-funding grants reflects the strong technical merits of Greenvale's exploration approach. Having received two grants in Round #14, Greenvale firmed up targets at Twin Peaks with co-funded gravity surveys and, subsequently, progressed these targets to drill testing.

The grants received this year will further advance target generation at Ranken, which is prospective for sediment-hosted base metal deposits such as the world-class Century and Mount Isa deposits, through gravity surveying aimed at identifying density anomalies. The cofunded gravity survey is designed to complement the NTGS Brunette downs gravity survey data, which will acquire over 11,500 ground gravity readings at 2 km spacing, and is funded through the Northern Territory Government's Resourcing the Territory initiative

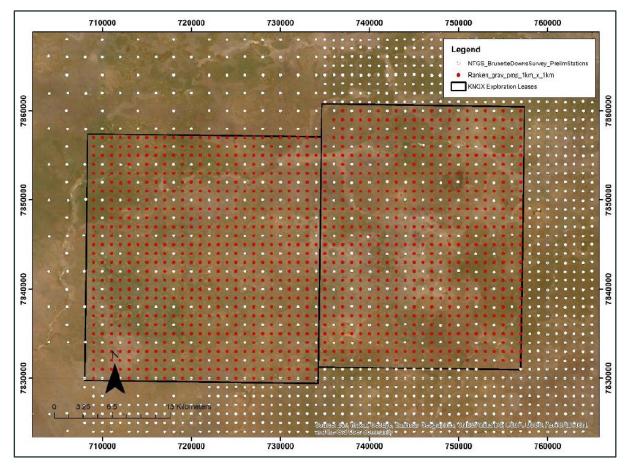


Figure 5: Ranken co-funded program gravity (red) and NTGS Brunette Downs stations (white)



The deep diamond hole at Leichhardt East will target the highest intensity magnetic response in the area. Based on preliminary assessments, this target area was identified as an area of exploration interest with several prospective features for IOCG-style mineralisation systems noted, including:

- The presence of near-coincident magnetic and gravity highs;
- Interpreted Warramunga Formation equivalents;
- · Structurally favourable area inclusive of intersecting regional fault structures; and
- Proximity to granites (unknown age).

Detailed gravity data were collected (at 200m spacing) over the target area to assist with detailed drill targeting over the area of interest. 3D-inversion modelling (magnetic and gravity) was conducted by Resource Potentials Pty Ltd to characterise the sub-surface density contrast and magnetic susceptibility of the target area.

Subsequent inversions using the magnetic data were completed by Mitre Geophysics to identify remnant magnetisation – a feature common to other Tennant Creek deposits.

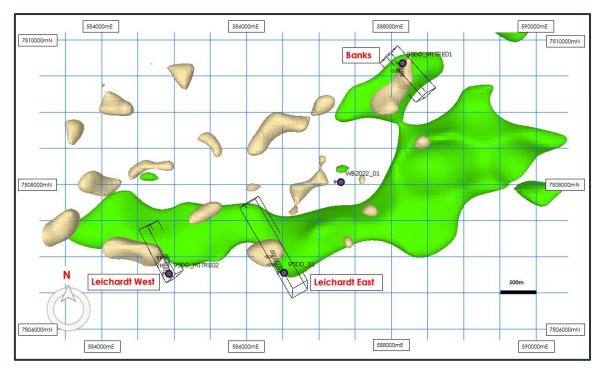


Figure 6: Central tenement drill designs and 3D magnetic (green) and gravity (cream) models

CONDITIONAL SALE OF KNOX RESOURCES PTY LTD

As detailed in its ASX announcement of 1 June 2022, Greenvale has entered into a conditional sale of 80% of its wholly owned subsidiary Knox Resources Pty Ltd, holder of all of its interests in the Georgina Basin, to Astro Resources NL (ASX:ARO). Further details of the proposed transaction are also included in the Astro Resources NL ASX release of 1 June 2022.



MANAGEMENT COMMENT:

Greenvale Mining CEO, Matthew Healy, commented:

"We're very excited to be back in the field and drilling again at Georgina. Our last program at Twin Peaks, completed right at the end of last year, highlighted the prospectivity of this frontier region. We are now back again and drilling in what is increasingly emerging as the 'hot' part of the belt, in and around our Central Tenement Group.

"The two targets we have defined, Banks and Leichhardt, are compelling from a geological, structural and geophysical perspective and, importantly, they are located close to an area of significantly increased exploration activity, and the copper discovery announced by Middle Island Resources at Crosswinds. Recent drilling by Inca has also yielded clear evidence of IOCG and SEDEX potential in the immediate area, and we are very much looking forward to what these two pivotal holes can deliver.

"I would also like to extend my thanks to the NT Geological Survey for their continued support of exploration in this frontier district. We are absolutely delighted to have been successful in our Round 15 funding applications – which will not only help to further advance exploration at the Georgina IOCG Project, but also add to the body of geological understanding in East Tennant more generally.

"With activity increasing and excitement building, we are continuing to move ever closer to unlocking what we all hope will be a world-class discovery in this emerging province."

Authorised for Release

This announcement has been approved by the Managing Director for release.

Alan Boys **Company Secretary**

Contact

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COMPETENT PERSON'S STATEMENT:

The information in this report that relates to Exploration Results is based on information compiled by Mr Matthew Healy, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AuslMM Member number 303597).

Mr Healy is a full-time employee of the company and is eligible to participate in a performance rights incentive plan of the Company.

Mr Healy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.